

Fluid Separation Methods Using a Fluid Pressure Driven and/or Balanced Approach

Abstract

The method separates a composite fluid, such as blood, into the components thereof in a centrifugal separation device. The fluid is delivered to a fluid receiving area in a rotor from which area the fluid travels through a radial inlet channel having an inlet channel height to a proximal end of a circumferential fluid separation channel. Near a distal end of the separation channel, fluid components travel into distinct first and second outlet channels. The height of the first channel is greater than the height of the more distal second channel. The inlet channel height is greater than the height of the first channel. The rotor may be balanced by axially symmetrical sets of inlet channels, separation channels and outlet channels or by a balance channel connected to the separation channel but displaced from the outlet channels.